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ABSTRACT

This report is concerned with the role of the Federal Government in environmental education. The purpose of this document is to explore the perception that there is a valid and desirable interrelationship between environmental education and satisfactory recreational experiences and opportunities for the public. Specific findings of the Nationwide Outdoor Recreation Plan Environmental Education Task Force are included with discussion and recommendations. The recommendations are presented in the following format: conclusions, options, and recommendations on effecting. The appendices list land management and non-land management agencies and their environmental education involvement, and list the references and people involved in this draft report. (Author/MA)

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1978 NATIONWIDE OUTDOOR RECREATION PLAN

TASK FORCE REPORT

Environmental Education and Outdoor Recreation

U.S. DEPARTMENT OF THE INTERIOR
Heritage Conservation and Recreation Service

SE 025 136

TASK FORCE REPORTS

This Mailing:

1. The Role of Non-Profit Organizations in Providing Outdoor Recreation Opportunities
2. Nationwide Trail System
3. Recreation Needs of the Handicapped
4. Environmental Education and Outdoor Recreation

Second Mailing

1. Needs of Private for Profit Enterprises in Outdoor Recreation
2. Federal Outdoor Recreation Land Acquisition-LWCF.

Third Mailing

1. Energy Conservation and Outdoor Recreation
2. Protection of Outdoor Recreation Values of Rivers
3. Public Outdoor Recreation Benefits of Federal Water Resource Projects
4. Roles/Functions of Federal, State and Local Public Agencies

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ENVIRONMENTAL EDUCATION

AN EMERGING ISSUE IN RECREATION

A Report of the Nationwide Outdoor
Recreation Plan Environmental
Education Task Force

Submitted to the
Heritage Conservation and
Recreation Service
June 9, 1978

DRAFT

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ENVIRONMENTAL EDUCATION: AN EMERGING ISSUE IN RECREATION

ISSUE ABSTRACT

The provision for satisfactory recreational experiences to the public is one dimension of the national quest for environmental quality and quality of life for all citizens. Recreation providers are currently seeking mechanisms for ensuring that the public will have those satisfactory experiences within a quality environment whether it be in our large urban areas or on our more remote lands. Recreation providers are now exploring environmental education mechanisms as a way of achieving those goals.

Purpose Statement

The nationwide solicitation of issues conducted by the Heritage Conservation and Recreation Service for subsequent inclusion in the Nationwide Recreation Plan yielded a number of responses which indicated that the recreation community perceived a valid and desirable interrelationship between environmental education and satisfactory recreational experiences and opportunities for the public. The purpose of this document is to explore that perception, emphasizing environmental education, assess its validity, examine existing arrangements at the Federal level in order to determine the feasibility of a role for the Federal Government, define it and propose new arrangements, mechanisms and options for Federal actions.

By the nature of the charge given to the Environmental Education Task Force subsequent sections of this paper will focus on a Federal role in environmental education rather than on recreation. But, the following brief background discussion will highlight critical parallels between environmental education and recreation so that it is more clearly seen why environmental education emerged as a recreation issue. At a point later in this paper the two constructs will be discussed within an appropriate context.

Perspective on the Issue

Environmental education and recreation are two constructs currently undergoing considerable elaboration and reclarification within their respective professional communities. If these parallel definitional processes have anything in common it is that each will result in a state of greater inclusiveness - states that could lead to considerable overlap of portions of respective perceived domains. It is possible that the current distinctions we tend to draw between education and recreation are in fact only specious ones in conformance with our traditional habit of cutting up the knowledge pie into relatively manageable pieces. To do so is understandable, but perhaps not very practical particularly in view of the way recreation practitioners and environmental educators view themselves.

Environmental education is a complex of disciplines (knowledge bases) woven together as a single strategy for recognizing, analysing

and, through a process of information synthesis, resolving environmental problems and/or gaining new understandings of the issues. As set forth in the purposes of the Environmental Education Act (PL 91-516) "environmental education means the educational process dealing with man's relationship with his natural and manmade surroundings and includes the relation of population, pollution, resource allocation and depletion, conservation, transportation technology, economic impact and urban and rural planning to the total environment." This meaning is even more broadly drawn in subsequent legislation to include energy and, in the regulations promulgated by the Secretary of HEW under the "working definition" section, ... "ideas and materials from many other areas such as the social sciences ... the arts, and other areas of the humanities all as appropriate and needed for the particular topic of inquiry."

The environmental education audience has not been limited to formal school groups but the fact is that the majority of monies distributed under the act's grants program and the focus of other Federal agency programs have been directed toward reaching a school age population. More specifically, those in the kindergarten to twelfth grade bracket. The Act does state that funds shall be available for community education programs on environmental quality and for public service personnel, government employees and business, labor and industrial leaders and employees.

While environmental education is highly inclusive in its content and in its audience, its potential for effect will not accelerate if

the impetus behind it proceeds exclusively out of the terms of the present Act. Congress is currently reviewing the Act partially in recognition of this situation.

Similarly, Congress is reviewing recreation. This review stems perhaps from a belief that recreation in all its constructive forms can make a purposeful contribution to the health, welfare and domestic tranquility of the nation and therefore some new "arrangements" are in order. Consistent with the mission of environmental education, the recreation mission also addresses important national social goals and problems.

It was a viewpoint of the 1974 NWP (nationwide plan) that "national and international problems of poverty, racial unrest, education and deterioration of our cities and the natural environment, housing, education and other social problems will demand the energy and creativity of our people for years to come." But, "... when increased leisure (is) available to a large percentage of the people, ... in such a life, recreation can perform a purposeful role. Its broad perspectives offer choices for increasing man's wellbeing. Its goal is to contribute to an environment in which prospects for human well-being are nourished and the true potential of our civilization realized." Environmental educators would also subscribe to that goal statement. To paraphrase a conclusion of the recent International Conference on Environmental Education, there needs to be a more human focused definition of environmental education with more emphasis on the quality of life rather than on environmental quality alone.

As previously indicated, Congress has recognized the need to take a close look at recreation, in particular, recreation in the urban setting. The results of that "close look" have been published by HCRS in the National Urban Recreation Study. As a part of this study, and as mandated by Congress, the HCRS was asked to analyze "...the capability of the Federal Government to provide urban-oriented environmental education programs (including, but not limited to, cultural programs in the arts and crafts) within such (subsequently proposed) options." Such a mandate would indicate that Congress perceived a kind of mutuality between recreation and environmental education (if not yet an overlap) as we noted earlier, some of the respondents to the HCRS' solicitation for recreation issues did.

Implicit in the remarks of the HCRS respondents was the certainty that an educated public, among other things, would do less damage to recreation facilities, appreciate facility and resource management constraints, receive more enjoyment from their recreation experiences through heightened environmental awareness, and, more likely would apply that same conscientiousness to all dimensions of their public activity.

Further analysis of the remarks of each respondent revealed that the the environmental education/recreation issue has two dimensions in the respondent's views:

(1) The perceived need for a Federal role in the provision of

environmental education to the general public, and (2) the integration of environmental education into recreation programming and resource management activities. These dimensions were explored by the Environmental Education Task Force within the framework of the following design.

Design

The exploration began by tracing Federal "facts" leading to a Federal state of the art in environmental education. The Task Force conducted an examination of existing legislation, policy documents, program descriptions, previous recommendations and other source materials listed in Appendix I. It sought input from EE practitioners currently engaged in Federal levels of activity and from decision makers and policy formulators.

Unfortunately, it was not possible within the scope of this paper to discuss all events, programs, resources and activities of the past or present. Our task was to construct a logical framework from which would emerge concluding action oriented recommendations. In having done so we touched only upon Federal agency's involvement as per our charge. Most of the remarks concerning Federal involvement will be centered around the activities of the Federal Land Management Agencies which include National Park Service, Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation, United States Forest Service, Corps of Engineers and the Tennessee Valley Authority. But, we fully recognize that agencies such as the Soil Conservation Service, National Science Foundation, Health,

Education and Welfare and the Environmental Protection Agency and others have made significant impacts in this arena long before this paper was ever anticipated. However, it is primairly because recreation and environmental education as program strategies have a potential for coming together and reinforcing one another on Federally managed lands that we will stress the activities of the land managing agencies.

The following section, "Findings" presents the outcome of the issue exploration process. Each finding is a specific statement of "what is". The Task Force examined these statements and developed a set of "what could be" recommendations. These were based on what we perceived as gaps in the current status of Federal Environmental Education activities and on our perceptions of how current arrangements could be strengthened.

A summary of Task Force findings is provided first followed by the specific findings which support the summary statements.

Findings

A. Summary

* THERE IS A NATIONAL NEED FOR ENVIRONMENTAL QUALITY

* THE FEDERAL GOVERNMENT CAN RESPOND TO THE NEED FOR ENVIRONMENTAL QUALITY THROUGH EDUCATION

* MOST FEDERAL AGENCIES HAVE MISSIONS COMPATIBLE WITH ENVIRONMENTAL EDUCATION

* FEDERAL LAND MANAGEMENT AGENCIES HAVE AN OPPORTUNITY TO LINK RECREATIONAL AND ENVIRONMENTAL EDUCATION GOALS

Specific Findings

There Exists A National Need For Environmental Quality

To the extent possible the Federal government resists passing legislation which places constraints on the market place. Yet, with issues of great magnitude, Congress does pass such laws. In the past decade Congress has passed constraining legislation which resulted, in 1975 alone, in the spending of 6½ billion dollars by private non-agricultural businesses for environmental capital investments. The following year, the Federal government itself spent almost 7 billion dollars to protect the physical environment and to control the results of environmental mismanagement.

A comprehensive energy policy which deals with the conservation and recycling of dwindling, non-renewable natural resources is still needed, however. Moreover, management policies which deal with all aspects of resources use also are needed, both to protect the resources and the lives of our citizens who are affected by the unhealthy results of these resources' misuse.

The following are indications that there exists at several different levels of our society a perceived need for improved environmental quality. First are cited several major pieces of legislation in the area.

* The Land and Water Conservation Fund (PL 88-578, as amended).
* The National Environmental Policy Act (NEPA) of 1969. While only procedural in nature, this Act requires an assessment of the likely environmental impacts of all major federal actions.

* The Environmental Education Act of 1970 (PL 91-516, as amended by PL 93-278). This Act established the Office of Environmental Education within DHEW, and makes provision for grants and non-monetary technical assistance to federal, state, and local agencies as well as private organizations. A bill to extend the Act, as amended, awaits passage by Congress as Title III of the omnibus Elementary and Secondary Education Act.

* The Coastal Zone Management Act of 1972 (PL 92-583). This Act makes grants available for the reduction, prevention, or amelioration of any unavoidable loss of valuable environmental or recreational resources where such loss would result from coastal energy activity.

* The Council on Environmental Quality was established as that part of the Executive Office of the President which provides the President with advice on environmental issues and assists him in developing and recommending policies which further environmental quality. It also oversees federal agencies' compliance with environmental impact statement provisions of NEPA, coordinates environmental policies and activities which involve some government entities, and prepares the President's Annual Environmental Report of Congress.

* The President's Environmental Merit Awards Program honors students - from elementary through high schools, summer camps, and youth groups - who have demonstrated exceptional commitment to constructive environmental service.

* The Intergovernmental Conference on Environmental Education, the first such meeting ever held, took place in Tbilisi, Russia, for a week in October 1977. Sixty-six Member States, including USA representatives, attended the UNESCO - UNEP sponsored meetings which produced 41 recommendations, including 16 under the heading, "Strategies for the Development of Environmental Education at the National Level". The Member States representatives will oversee the development of these strategies within their own countries. In the USA, this function is being carried out the the Task Force of the same name within FICE's Subcommittee on Environmental Education.

* National groups long active in matters concerning parks, recreation, conservation, and the like, such as the Conservation Foundation, National Wildlife Federation, Izaak Walton League and National Parks & Recreation Association, have sponsored studies, developed educational and public information materials, provided public forums, and in general, stimulated and maintained public interest in environmental issues, including environmental education

* Citizen action groups have organized and actively pursued better environments through citizen suits; lobbying; fighting for funds from State and local governments to provide funds for adequate staffs for control agencies; using the press, radio, and television media; and holding public hearings on critical environmental issues.

* Issue statement responses received by the Heritage Conservation and Recreation Service, in the majority of cases implicity indicated the need for more widespread environmental education.

* The Federal Land Policy & Management Act of 1976 (PL 94-579), section 102 (a)(8) declares that it is a policy of the US, as has been indicated in terms of concern in much of the legislation of the past decade - that "... the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use ...."

The Federal Government Can Respond to the Need for Environmental Quality Through Education

The Federal government is deeply involved with various aspects of environmental education ranging from grants and programs under the Environmental Education Act to providing thousands of hours of interpretation to citizens visiting federal lands. Whether the Federal government should be deeply involved in environmental ed-

ucation has been a subject of debate. However, as the following material domonstrates, federal involvement in environmental education efforts is a logical necessity once the scope and magnitude of environmental problems are considered.

* Pollution problems and the issues of resources allocation know no State or national boundries. Only the Federal government has the statute authority and jurisdiction to deal with these national and international problems, and to mount an educational effort of the scope necessary.

* The magnitude of environmental problems facing the United States today is such that private enterprise or State and local governments could probably not effect solutions without Federal assistance. Multidisciplinary efforts involving ecologists, economists, engineers, agronomists, educators, etc. are necessary along with substantial funding and overall coordination. The Federal government has the resources, manpower, and expertise to correct massive environmental problems ... and to mount an effective educational campaign as part of the effort.

* The Federal government as caretaker of one third of the nation's land has a special responsibility for the environmental protection and wise stewardship of these resources. Urban encroachment, priority conflicts, and heavy public use are a few of the problems facing federal land managers. However, these same issues present unique opportunities if used as a focus for a well conceived environmental education program. Both in terms of benefits to the resource and benefits to the visiting public, environmental education is a logical management tool for use on our federal lands.

* American society has accepted the precept that education is a legitimate tool for social change. Although actual implementation of programs is a function of State and local governments, the Federal government plays a major role in

funding and coordination of broad based educational efforts at the national level. The US Office of Education plays a major role through the Environmental Education Act in funding and coordination of the necessary steps for implementing an education program to deal with environmental problems.

* The seeming breakdown of many urban social and economic systems has sharply pointed out the need for an effective mechanism to deal with these resource related issues. With some 70 percent of the nation's citizens now located in urban areas, the urban crises is of a magnitude which calls for Federal concern. The basic environmental/resource problems which underlie these crises will require innovative and broad based solutions of which environmental education is a prominant component.

* In addition, the Federal Interagency Council on Education has analyzed the Federal role in environmental education. In a paper prepared for the Secretary of Health, Education and Welfare, titled "Towards a Comprehensive Federal Education Policy", they concluded: "The Federal government should encourage development of education programs that deal with such emerging national concerns as ... environment, energy, population and rural, urban and suburban issues." (p. 86)

Government Agencies with Responsibilities Compatible with Environmental Education

Through Federal government agencies empowered by enabling legislation and their amendments, provision is made for information to be given to the public regarding people and the environment in which they live, work or visit. Thus, the government, through its agencies' involvement, has become a major repository for data which ranges from national population census statistics to the geographical distribution of environmental factors that influence

the quality of life and status of earth's finite resources. The dissemination and interpretation of this information, through both oral and written means via federal agencies, has become a vital educational tool for all sectors of the American population. Through these existing federal agencies' functions which create the vehicles for interaction with the American public, it has seemed a natural next step for the Government to strengthen its position in serving the public by coordinating and providing more information and education concerning environmental quality and ecological balance.

Federal land management agencies for some time have provided resources for the carrying out of educational programs -

* by providing portions of the land mass managed as potential study areas for educational groups as they learn the interrelationships of the natural and cultural systems within various ecosystems,
* by providing data from agency libraries, research inventories, collections, and related facilities,
* by providing staff for groups' orientation to the facilities and resources,
* by providing physical site facilities where available and appropriate.

Federal land management and resource related agencies for some time have assisted educational sectors of communities -

* by encouraging organized and educational groups to use public lands to learn the natural processes and systems of the environment, and humankinds' interrelations and responsibility to and for the environment;

* by providing expert technical assistance for the preparation and design of educational programs and materials,

* by developing and disseminating resource related information materials that can be used for education purposes,

* by providing environmental awareness training through organized workshops involving teachers, administrators, community leaders, etc.

Federal research and education related agencies have assisted educational sectors of communities -

* by providing grants for research on educational programs as they pertain to specific topics and/or audiences;

* by providing grants for development and carrying out of educational programs regarding specific topics or are of interest to special audiences;

* by providing grants for evaluation of educational programs and teaching techniques, etc.

All other Federal agencies have provided services which, en toto, enhance the overall American society through protection or regulation of various segments of our industrial and agricultural sectors -

* by providing information and/or printed materials to the American public on request.

The Federal government's responsibility for environmental education was made explicit through the Environmental Education Act of 1970. This Act authorized all Federal agencies to provide information and technical assistance to the public in the matter of environmental education. Those agencies which saw their missions more effectively accomplished if environmental education were to be provided to the specific publics which they served, got involved

in environmental education. They developed their policies in accord with their individual missions so that environmental education became a viable function in relation to their mandates, and became major providers of educational opportunities and information to citizens regarding a quality environment.

Land management agencies have provided some environmental education opportunities for educational sectors of communities -

* by providing on-site resources in carrying out environmental education programs,
* by providing staff assistance in conducting environmental education programs.

Land management and resource related agencies have provided some EE opportunities for communities -

* by encouraging the use of public and available private lands by organized groups for environmental education purposes,
* by providing technical assistance in the planning and development of environmental education programs and materials by organized groups,
* by developing and disseminating environmental education materials which are specifically site or resource related but which can also be used by individuals or organized groups for environmental education purposes,
* by providing environmental awareness training through workshops involving teachers, administrators, community leaders, etc.

The DHEW's Office of Education Involvement in Environmental Education

Within the Office of Education, the Office of Environmental Education (OEE) was established by the Act of 1970. OEE's primary interests have revolved around grants and contracts with nonprofit educational and educational research sectors of the nation to support research, demonstration,

and pilot projects designed to educate the public on the problems of environmental quality and ecological balance.

Funding has been available for:

* development of environmental education curricula,
* dissemination of information relating to environmental education curricula,
* support of environmental education programs at the elementary and secondary education levels,
* training programs in environmental education/awareness,
* planning of outdoor ecological study centers,
* preparation and distribution of materials suitable for use by the mass media in dealing with the environment and ecology,
* projects designed to demonstrate, test, and evaluate the effectiveness of environmental education activities,
* the development of policies and recordkeeping, as they pertain to the above.

OEE can provide technical assistance, through the ACT, to all Federal agencies at the agencies' request.

Cooperative Agreements Arrangements Can be Made Among Federal Agencies for Joint Programs.

F.I.C.E. (Federal Interagency Council on Education)

DHEW, OE, directs the Federal Interagency Council on Education for the coordination of the educational activities of Federal agencies to identify the nation's educational needs and goals, and to advise and make recommendations on educational policy to the Secretary of HEW, and through him, to heads of other agencies and the President.

Remaining Federal agencies have appropriate information that may be used in environmental education programs -

* by disseminating information related to people/environment from research, contract, or other resources to the American people in general as well as to the educational sectors of the nation.

Federal Land Management Agencies Have an Opportunity to Link Recreational and Educational Goals

The public search for satisfactory recreational opportunities has placed increasing pressures on the nation's environmental resources. New technologies in the leisure industry have broadened the options for the recreating public and have created new problems for the managers of recreation resources. For example, in outdoor recreation off road vehicles, dirt bikes and snowmobiles present new challenges for the resource managers charged with a responsibility to maintain and preserve a quality environment for all.

Even the demands for non-mechanized forms of recreation - hiking, cross country skiing, interpretive walks, viewing exhibits and visiting festivals or restorations - place vast numbers of people in often limited space at the same time, thus detracting from the potential experience or causing conflicts among recreationists. Incompatibility of recreation forms taking place in limited space or recreation that is inconsistent with resource management goals can be addressed by creative and knowledgeable managers through the planning process in such a way that resources are less stressed and people have a reasonable opportunity to obtain satisfaction from their experiences.

Provision for recreation in urban areas where space, facilities and financial resources are often limited is perhaps the ultimate challenge for the recreation community. Extending our concept of

recreation to include emerging forms uniquely adapted to urban areas and urban needs will enable us to reach far more people than we would if we continued to regard public recreation as that which takes place in remote areas on vast unspoiled acreage.

The Federal land management agencies have perhaps dual roles to play in this challenge as both providers of land and facilities and managers of many of the nation's historical, cultural, and scenic resources. One aspect of this duality is to provide and manage a significant recreation resource base; the other is to broaden simultaneously their own and the public's understanding of complex environmental interrelationships. The following supports the need for carrying out these dual roles:

* The Federal land management agencies administering over 500 million acres can be collectively considered as the nation's principal public recreation landlord although no one agency deals exclusively with recreation nor has provision for recreation as its primary purpose. Individual units in some agency's "system" may have been established specifically for recreation.

* Federal land management agencies receive acquisition and development monies under the terms of the Land and Water Conservation Fund for, among other purposes, the purpose of making available to the public additional lands for recreation.

* Agency's land management plans which could include educational and recreational elements are based upon an agency's overall mission and the specific legislation which creates a given unit in a system.

* Stewardship of historic, scenic, and natural and cultural features of the nation is also a component of the various missions of the Federal land management agencies and is set forth as the policy of the Federal government in the National Environmental Policy Act, in the Antiquities Act and Historic Preservation Act.

* The missions, purposes and policies of the Federal land management agencies set forth to the agencies a divergent and complex system of land use goals within which there are seemingly conflicting objectives e.g. recreation and preservation. Only now is the public, as well as the agencies, beginning to understand the intricate balance within ecological systems and that proper management is necessary in order to derive the most beneficial use of land now and in the future.

* Environmental education, which has as its purpose the education of citizens about environmental quality and ecological balance, is a means through which Federal land management agencies may reconcile conflicting land use objectives and further their missions to provide for land uses which are not inconsistent with the several purposes for which the lands have been acquired.

* Some Federal land management agencies offer interpretive services providing simultaneous recreation and environmental education opportunities. One of the primary purposes of such programs is to ensure that the people who utilize the resources do so conscientiously and with a responsibility to contribute to the preservation and enhancement of the environment.

* The lack of public lands managed by Federal agencies and which are proximate to large urban centers diminishes the opportunities for urbanites to experience needed recreational and educational benefits porvided by existing programmatic mechanisms now in place on many more remote Federal lands.

* Several Federal land management agencies have established multipurpose recreation complexes in or near major metropolitan areas which have the potential to mitigate any recreational and/or environmental education deficiencies of urban populations. The establishment of Gateway NRA in New York City, Golden Gate NRA in San Francisco, Cuyahoga National Recreation Area in Ohio and the Minnesota Valley National Wildlife Refuge are examples of new approaches to these deficiency problems.

RECOMMENDATIONS

Recommendations are offered in two, key findings areas. These are:

+ MOST FEDERAL AGENCIES HAVE MISSION COMPATIBLE WITH ENVIRONMENTAL EDUCATION.
+ FEDERAL LAND MANAGEMENT AGENCIES HAVE AN OPPORTUNITY TO LINK RECREATIONAL AND ENVIRONMENTAL EDUCATION GOALS.

These findings were considered most critical for addressing the needs expressed by the respondents to the HCRS request for national recreation issues. To recap those needs, they were: (1) the perceived need for a federal role in the provision of environmental education to the general public, and (2) the integration of environmental education into recreation programming and resource management activities.

The format for this section is as follows:

CONCLUSIONS: Specific statements of the need based on the findings.

OPTIONS: An array of action areas for addressing the conclusions.

RECOMMENDATIONS ON EFFECTING: Proposed methods for federal solutions.

CONCLUSION I: Environmental education is viewed by federal agencies as an auxiliary, subordinate program, not as an integrated functional arm of management, operations (including recreation), and public information programs and practices.

OPTIONS	RECOMMENDATIONS ON EFFECTING
1. Require that all federal agencies include environmental education as an integrated part of their management, operations (including recreation), and public information programs and practices.	...Have Secretary of Interior draft legislation for Congress which would explicitly authorize all federal agencies' functions in management, operations, and public information programs and practices, to have environmental education components as an integral part.
2. Require that all federal land management and other natural or social resouces related agencies draw up, in cooperation with Office of Environment Education, Department of Health, and Welfare, policies which will implement the existing legislation of the Environmental Education Act of 1970 (as amended), and the Federal Land Management Act of 1976 (Sec. 102 (a)(8). ...After policy has been drawn, disseminate through producing agency in routine manner, as well as accompanied by special in-house attention, such as article in agency's house organ, director of agency holding all-employees meeting, special memoranda, etc.	...Have Secretary of Interior work out cooperative agreement with Office of Environmental Education, Department of Health, Education, and Welfare, and then mandate the function to appropriate offices in each of Interior's bureaus.
3. Place environmental education as a line item in federal agency budgets.	...Have Departmental Secretaries instruct the appropriate offices to so place environmental education at budget submission time.
4. Effect a change in one aspect of the LWCF program to specify that a portion of the Secretary's Contingency Fund be used to meet identified school systems' environmental education needs in urban areas.	...Have appropriate Interior staff draw up the necessary changes in the administrative procedures.

OPTIONS	RECOMMENDATIONS ON EFFECTING
5. Have the federal land management agencies jointly mount a television series that will be both informational and entertaining at a high level, to show the public the variety and high quality of these agencies' (a) resources' intrinsic values, and (b) management and operations programs, particularly as these reflect sound interrelatedness of the environmental and management aspects of the program and practices.	...Have Secretary of Interior direct the appropriate personnel to see that the necessary actions are taken for such a program to be developed.
6. Amend the Pittman-Robertson Wildlife Restoration Act and the Dingell-Johnson Sport Fish Restoration Act to require that a certain percentage of the monies collected under these acts be used for environmental education programs.	...Have Secretary of Interior appoint appropriate personnel to initiate the drafting of such legislative amendments for consideration by possible congressional sponsors.
7. Have the legislative offices of the federal agencies now involved in environmental education work with appropriate Congressional committees to assure that monies actually appropriated match the funding allowed in the Environmental Education Act.	...Have Secretary of Interior direct the agencies' legislative offices to take such action as necessary.

CONCLUSION II: The potential for federal land areas to serve as outstanding examples of ecologically sound management is often unfulfilled.

Secondary objectives such as recreation or other considerations such as aesthetics are often needlessly sacrificed to achieve the primary purposes of the area.

Management plans sometimes deal with short-term goals and immediate needs -- inadequately addressing the concept of maximizing benefits over the long term.

Energy conservation and energy consciousness are not always fully integrated into day to day management activities.

OPTIONS	RECOMMENDATIONS ON EFFECTING
1. Provide a more efficient system for disseminating and implementing research findings having local management implications.	...The Sikes Act should be amended to broaden the U.S. Fish and Wildlife Service's authority to fund and carry out technical assistance activities in the area of wildlife and habitat management. The Fish and Wildlife Service should act as a clearing house to make information on good management available to field managers.
2. Provide additional training in energy conservation, pesticide use, landscaping, etc. to area managers and staff.	...Within the framework of mandates and budgetary constraints governing each agency, a land management plan should be developed for each federal area. This plan should address issues such as energy conservation, aesthetics, alternate land uses, etc. and integrate these concerns with the primary benefits the area was established to produce when possible. The plan should include provisions for employee training when needed. ...Each land based agency should adopt policy and initiate actions necessary to make each field station a model of energy conservation. This policy should permeate all aspects of the way the agency does business and should not be confined to areas traditionally addressed such as buildings, autos, etc. Programs to change the energy ethics

OPTIONS	RECOMMENDATIONS ON EFFECTING
	of employees should be developed so that energy awareness is taken with them off the job and into the community.
3. Formulate long range management plans incorporating research findings and state of the art knowledge of land management activities.	...Each land based agency should adopt policy and initiate actions necessary to make each field station a model of energy conservation. This policy should permeate all aspects of the way the agency does business and should not be confined to areas traditionally addressed such as buildings, autos, etc. Programs to change the energy ethics of employees should be developed so that energy awareness is taken with them off the job and into the community.

CONCLUSION III: The quality, effectiveness and emphasis of environmental education programs varies considerably among and within federal agencies because training programs for deliverers are not founded upon contemporary conceptual bases and methodologies which utilize a total interdisciplinary approproach.

OPTIONS	RECOMMENDATIONS ON EFFECTING
1. Federal agencies should establish and/ or strengthen professional development training programs for all staff directly or indirectly involved in delivering environmental education to the public. Those programs should incorporate and give emphasis to agreed upon national goals for environmental education.	...The Secretary of the Department of Interior should immediately establish a policy which sets forth to the bureaus guidelines for personnel training programs in environmental education for all interpretive and management personnel.
2. Federal land management agencies should provide training programs for its professional resource managers and planners that stress the benefits and positive out comes to be derived from integrating environmental education concepts into their total management approach.	...The Department of the Interior should increase its training budget to accommodate the need for personne development commensurate with the costs of implementation of a training policy.
3. Managers and stewards of the nation's historical cultural aesthetic and recreational resources should view the public as a potential constituency for broad based environmental education and design their services to the public accordingly.	...The Interior Bureau of Personnel, the Interior Steering Committee for Environmental Education and appropriate personnel from the Civil Service Commission should work together to establish a register specifically for Environmental Education specialists and Interpreters that ensures certain basic skills at the entrance level.

CONCLUSION IV: Technical assistance from the United States office of Environmental Education to other federal agencies, particularly those that play a role in preserving and enhancing environmental quality, including the federal land management agencies has been lacking or nonexistence.

OPTIONS	RECOMMENDATIONS ON EFFECTING
1. United States Office of Environmental Education should conduct a federal needs assessment among involved agencies to determine the nature and extent of technical assistance desired.	...United States Office of Environmental Education should request a specific authorization and appropriation for provision of technical assistance to other federal agencies.
2. United States Office of Environmental Education should, though Heritage Conservation and Recreation Services, conduct an assessment targeting the recreation community to determine their needs in environmental education.	...United States Office of Environmental Education should, under Sec 6, Public Law 91-516, contract with an institution or recognized professional organization for research that identifies and describes potentials for integrating environmental education and recreation.
3. United States Office of Environmental Education should bring together leaders and practitioners from the recreation community to determine the nature, scope, feasibility and desirability of an environmental education emphasis in recreation curricula.	...United States Office of Environmental Education should, under Sec. 6, Public Law 91-516, contract with an institution or recognized professional organization for research that identifies and describes potentials for integrating environmental education and recreation.
4. United States Office of Environmental Education should establish continuing communications with those responsible for the interpretive and or environmental education functions within the federal Land Management agencies.	...United States Office of Environmental Education should, under Sec. 6, Public Law 91-516, contract with an institution or recognized professional organization for research that identifies and describes potentials for intergrating environmental education and recreation.

CONCLUSION V: Urban communities have strong environmental education/recreation needs; these relate mainly to lands and facilities, environmental education/recreation programs, accessibility, and information availability.

OPTIONS	RECOMMENDATIONS ON EFFECTING
1. Give federal agencies explicit authority to acquire or use, and develop land specifically for initiating environmental education/recreation programs in or near urban areas.	...Have Congress give authority to federal agencies to acquire/use, and develop land for environmental education programs and easements, as necessary, in or near urban areas.
2. Have federal land management agencies review their long range acquisition and development priorities and give greater emphasis to their efforts for environmental education/recreation programs in or near urban areas.	...Have the Secretary of Interior, Secretary of Agriculture, and TVA Director direct their agencies to review their long range acquisition and development priorities, giving high priority to potential environmental education/recreation programs in or near urban areas.
3. Give federal agencies through legislation, explicit authority to provide transportation to those communities which need this service to attend environmental education/recreation programs.	...Have Congress give authority and funding to federal agencies to provide transportation to urban communities for this purpose.
4. Have federal agencies make readily available to the urban population information regarding materials and programs pertaining to the environmental education/recreation programs.	...Have the Secretary of Interior, Secretary of Agriculture, and TVA Director direct their agencies to work with organized civic and education groups and public media to make environmental education/recreation program materials and information available to the urban population.

CONCLUSION VI: Cooperation and communication between environmental educators and recreation interests need to be strengthened at the federal level.

OPTIONS	RECOMMENDATIONS FOR EFFECTING
1. Have HCRS establish continuing liaison between itself and environmental educators at the federal level in order to provide for that function within its program of technical assistance to the states.	...Have HCRS prepare a budget request for at least one environmental education specialist to act as liaison with other federal agencies having recreation interests and missions, and to provide technical assistance to those agencies. ...Have HCRS prepare and circulate an Action Plan to implement Sec.2(q)(2) of P.L. 88-29 (their organic act), and as necessary request such appropriations to implement the plan.
2. Have HCRS pursue the recommendations of the National Urban Recreation Study (1978) as they pertain to environmental education.	...Have HCRS contract with an appropriate institution or organization to review the recommendations of the National Urban Recreation Study and propose immediate arrangements to ameliorate the deficiencies stated in the environmental education section.

CONCLUSION VII: State and local recreation/conservation areas and programs financed through federal monies do not always include a strong environmental education components.

OPTIONS	RECOMMENDATIONS ON EFFECTING
1. Provide state and local governments with additional technical assistance which would deal with the concept of integrating environmental education components into their recreation/conservation activities.	...Have the Office of Education, through the Environmental Education Act, increase funding and activities in the areas of technical assistance to state and local recreation/conservation programs.
2. Earmark a portion of federal monies used by states and local governments in recreation/conservation activities for environmental education.	...Have Congress amend the Pittman-Robertson Wildlife Restoration Act and the Dingell-Johnson Sport Fish Restoration Act to require that a certain portion of monies made available through the acts be used for environmental education facilities and programs, giving priority to programs which emphasize basic ecological knowledge, such as food chains, population cycles, management techniques, etc.
	...Have Congress amend the Land and Water Conservation Fund Act to require that a portion of the monies made available through the Fund be used for environmental education needs assessment and program planning in the context of development projects.

CONCLUSION VIII: The Federal Interagency Committee on Education's Subcommittee on Environmental Education (FICE/SEE) has not played a strong role as coordinator of federal environmental education activities.

OPTIONS	RECOMMENDATIONS ON EFFECTING
1. Have FICE/SEE prepare and distribute, in conjunction with its membership, suggested guidelines for expanding the environmental education content of affected agencies' public service announcements, public information services, and technical publications.	...Have the U.S. Office of Education, DHEW, increase the publications budget of FICE for use by FICE/SEE.
2. Have FICE/SEE, in conjunction with U.S. Office of Environmental Education, prepare and distribute an intra-governmental newsletter which would highlight agencies' environmental education activities, and provide information on FICE/SEE activities and any pertinent legislative matters.	..Have the U.S. Office of Education, DHEW, increase the publications budget of FICE for use by FICE/SEE for this endeavor.
3. Have FICE/SEE establish a task force to examine the potential for integrating environmental education into the recreation activities of the federal government.	...Have HCRS contact FICE/SEE chairperson about possibility of carrying out this activity.

CONCLUSION IX: Accidnets and safety problems continue to detract from visitor experiences at federal land areas.

OPTION	RECOMMENDATIONS ON EFFECTING
1. Visitor safety programs and materials should be integrated into each agency's Environmental Education program.	...Each agency should establish and implement a policy on integrating safety, and Environmental Education. ...The potential for cooperative agreements and contracts should be explored with groups such as Red Cross to provide training, educational materials, etc.

CONCLUSION X: Environmental Education materials, programs, and facilities on federal areas most often do not consider the needs of special groups such as the mental or physically handicapped.

OPTIONS	RECOMMENDATIONS ON EFFECTING
1. Federal agencies should review existing policies and programs to assure that both exist to assure access for the handicapped to Environmental Education / recreation programs.	...Each agency should appoint an officer to review, coordinate, and monitor implementation of policy an accessibility for the handicapped.
2. The issue of accessibility to recreation facilities and programs should be fully considered in efforts to revise or initiate standards within federal agencies.	...The Director of each federal agency should direct the responsible office within his bureau to initiate or revise such standards.

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APPENDIX I: LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources; and/or Remarks
DEPARTMENT OF AGRICULTURE	XX			...Also has Smokey Bear & Woodsy Owl programs, both of which have a variety of teaching aids and camping materials. ...Has a cooperative agreement for education research.
1. Forest Service ...Has extensive library of factual materials on all aspects of environmental management. ...Has wide variety of environmental publications, including "Investigating Your Environment" series. ...Has had 8 years of teaching education by "process approach" workshops. FUTURE: Expects to expand EE program by developing new program at new Pinchot Institute for Conservation Studies in Pennsylvania.				
DEPARTMENT OF DEFENSE (NOTE: All Armed Forces manage huge areas of land.)				
2. U.S. Army Corps of Engineers			X	...Holds "Eco-Meets"--a competitive event in plant identification, orienteering, interpretation.
DEPARTMENT OF INTERIOR				
3. Bureau of Land Management ...Has training for 50 YCC sites. ...Makes a few visits and evaluations of EE programs with elementary & secondary schools; some higher institutions.		X		...Is developing a Strategic Plan for Information Management. ...Has multimillion dollars program of "environmental assessment:" is using this to create a land resource data base (@ rate of 10,000 items/year).

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources; and/or Remarks
DEPARTMENT OF INTERIOR (continued)				
4. Bureau of Reclamation ...Has integrated EE into its information/public involvement programs, publications, movies, etc. ...Has integrated EE into its YCC, YACC, and Job Corps training at Reclamation-operated camps. ...Especially in California, but in all Reclamation state, includes EE in interpretation programs for all groups at dams and power plants.		XX		...Is in process of upgrading and broadening its EE programs.
5. Fish and Wildlife Service ...Has formal EE (on requested basis, both land and school based). ...Has informal EE thru personal services of interpretation, plus self-guiding interpretation. ...Includes environmental messages in all PI media. ...Has developed EE materials, including the "We Can Help" series. FUTURE: In near future is expanding EE involvement with activity guides dealing with fishery resources, training manuals for land managers, & activity guides focusing on natural energy systems.	X			
6. Geological Survey			X	...Should have geological data, maps, and expertise valuable for EE use.

APPENDIX I: LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources; and/or Remarks
DEPARTMENT OF INTERIOR (Continued)				
7. National Park Service ...Has national programs, some land- some schools, some materials-based. ...Has developed EE materials for kindergarten thru eighth grades, including a film strip series (of 4) ...Has some EE messages in regular interpretation activities at all kinds of sites (i.e., natural, historical, etc.) FUTURE: Is developing a training manual in EE for interpreters, with accompanying videotapes.	XX			
8. TENNESSEE VALLEY AUTHORITY ...Has formal and informal EE programs. ...Maintains year-round residential EE Center. ...Provides consultive services in EE. ...Sponsors regional educational consortium for EE. ...Offers contracts for EE. ...Has only a few publications. FUTURE: Expansion of energy component and full implementation of YCC and YACC programs with EE integration.	XX			

June 9, 1978

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
1. COUNCIL ON ENVIRONMENTAL QUALITY			X	..Has studies on environment carried out; produces Annual Reports on all aspects of national environment for President
DEPARTMENT OF AGRICULTURE				
2. Extension Service			X	..Thru human agents, explains technical side of environmental matters, mainly re govt regulatio
3. Science & Education Administration			X	..Conducts programs for 4-H Youth and extension programs for adults
4. Soil Conservation Service ...Has cooperative programs. ...Has provided widespread dissemination to publications produced (including audiovisuals). ...Provides consultive technical service, including national & regional workshops, seminars, & youth organizations help. ...Gives some minigrants. ...Gives scholarships for teachers. ...Provides in-house training. ...Has formal EE with school systems.	X			..Permits use of its heavy machinery in some conservation districts.

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
DEPARTMENT OF COMMERCE				
5. National Oceanic & Atmospheric Administration: National Sea Grant Program ...(Program operates under concept of advisory or extension service) ...Holds some workshops for teachers. ...*One grant is now developing a national marine policy and techniques for public awareness.			X (as such)	..Offers matching funds (grants) to colleges, universities, and other groups for education. *
6. National Oceanic & Atmospheric Administration: Office of Coastal Zone Management ...Has some free, some for-sale publications aimed at coastal education. ...Currently funds (partially) a one-term coastal studies curriculum (interdisciplinary).		X		..Budget: $50,000 "in coming year."
7. DEPARTMENT OF ENERGY ...Operates at national, regional, and state levels. ...Produces publications, including lesson plans, manuals, sourcebooks, exhibits, and audiovisuals. ...Holds conferences and faculty workshops, plus training activities at universities. ...Sponsors some student research participation. ...Produces exhibits for science museums.	X			..Offers grants. ..Sponsors research in related science and engineering areas. ..Conducts national science and engineering fair.

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
DEPT. OF HEALTH, EDUCATION & WELFARE				
8. Office of Dissemination & Resources: National Institute of Education			X	..Primarily works in EE field thru ERIC (ERIC/SMEAC, ERIC/CHESS, and ERIC/CRESS). Produces ERIC Descriptors.
9. National Institutes of Health, Nat'l Institute of Child Health & Human Development: Center for Population Research			X	.,Has publications that relate only in marginal way to EE. ..Sponsoring 2 research studies re economic impact of population.
10. Public Health Service, NIH: Nat'l Institute of Environmental Health Sciences (NOTE: Mission is in environmental health research and training: environmental toxicology, pathology, mutagenesis, etc.; plus epidemiology and bio-statistics.)			X	..Gives grants for research & training. ..Provides support for both institutions and individuals.
11. Office of Education: Agriculture, Agribusiness, &Natural Resources			X (as such)	..Primarily disseminates publications of other federal offices to teachers of agriculture, but finances publication of some of these. Major emphasis in all levels of career education information.
12. Office of Education: Energy and Education Action Center ...Coordinates OE "energy-focused efforts." ...Strengthens linkages of federal agencies and education community.	XX			

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
Office of Education: Energy and Education Action Center (continued) ...Coordinates "federal agency efforts & activities in...energy education and energy conservation to assist state,local &other educational agencies." ...Serves as information center and data distribution network re energy. ...Serves as facilitator of technical assistance by providing access to federally employed specialists in energy fields, or to university & professional personnel who are employed on "roving expert basis," or to groups of volunteers who assist agencies. ...Administers a Resource Materials Center to exhibit materials, simulators, games & other education activities. ...Conducts training programs for all levels of govt employees (nat'l,local,state), & everything that might go with this. ...Maintains access to a core of personnel designated by each participating agency, plus administers a personnel exchange program. ...Supports development of model pre-service and in-service training programs & projects for new professionals in energy field and teachers. ...Provides leadership & support in development of new energy conservation supplemental curriculum materials.				

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
13. Office of Education: Office of Environmental Education ...Identifies and explores approaches to locally perceived development needs. ...Identifies,explores, designs and/or develops "contextual frameworks that can facilitate the articulation & manipulation of the content of environmental quality issues within the context of quality of life (the content of EE)." ...Explores,assesses and design inquiring/creative learning systems so (a) "various constructs..can continue to be generated... and adapted...to specific learning needs of all sectors of society;" (b) citizens can... participate in...environmental problems;" (c) inquirers (citizens) can have access to the basic information,tools, & methods available for problem definition, futures-creative problem resolution..." ...Awards to public one-year competitive general grants and minigrants ($10,000 or less), and to private non-profit groups. ...Has contracted with University of Virginia to draw up a directory of project abstracts on all grants given to date. ...In Fall 1977, it held a "consultation" with current grantee population to identify and address specific technical assistance needs; report on this, and plans for the future, is also being prepared.	XX			..This Office was established b the Environmental Education Act of 1970. Was involved in June 1977 "Brademas Hearings" on extension of Act. ...This was due in April '78; no OEE will project no date for its completion. ...Due date for this also was April '78; now

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
DEPT OF HEALTH, EDUCATION & WELFARE (continued)				
14. Office of Asst. Secretary for Health: Office of Population Affairs ...Is compiling a materials inventory of population & EE materials of federal agencies. ...Serves as DHEW liaison with federal agencies which support population/EE programs, or programs with high potential for such future support. ...Consults with education associations & educators and administrative staff of elementary school thru colleges/universities, on new approaches to all aspects of education. ...Supported production of "Options: A Teacher's Guide to the Report of the Commission on Population & the American Future." ...Has provided AV materials to educators.		XX		..Is a "first cut" by FICE's Subcommitte on Population Education; deals almost exclusively with population, not EE, materials.
DEPARTMENT OF HOUSING & URBAN DEVELOPMENT				
15. ...Develops policies & procedures a la housing/community planning. ...Has published several documents pertinent to EE.			X (as such)	..Develops environmental standards, policies & procedures for energy conservatio and strategies for amelioration of envir problems, e.g., air & noise pollution.
DEPARTMENT OF INTERIOR				
16. Bureau of Indian Affairs			X	

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
DEPARTMENT OF INTERIOR (continued)				
17. Bureau of Mines			X	
18. Heritage Conservation & Recreation Service ...One of the 16 issues in the developing Nationwide Recreation Plan is Environmental Education & Recreation; draft paper was completed 6/9/78.			X	..Is new agency, having evolved from Bureau of Outdoor Recreation and parts of National Park Service.
19. Land and Water Resources (See BuRec + BLM)				

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
DEPARTMENT OF JUSTICE				
20. Law Enforcement Assistance Administration: Nat'l Institute of Law Enforcement & Criminal Justice			X	..Has documents on crime prevention and closely related matters.
21. DEPARTMENT OF LABOR			X	
DEPARTMENT OF STATE				
22. Agency for International Development ...Has had some training for AID Mission personnel to ensure that these officials are "conversant on environmental issues." Top level decision makers had seminar conducted by Brookings Institute and the N.C. Training Program for Engineers.			X (as such)	..Expects to begin new 2-year program related to environmental matters. ..Helps fund the Man in the Biosphere (MAB) program. Budget: $880,000 for next 2 years.
23. Bureau of International Organization Affairs: Directorate for UNESCO Affairs ...Sponsors international meetings, cooperation, etc. ...Was highly involved in Tbilisi, Russia, EE conference (Oct 77), and in Man in the Biosphere program.	X (as necessary, but in administrative, international facilitator role only)			

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
DEPARTMENT OF STATE (continued)				
24. U.S. National Commission for UNESCO			X	..Reports itself as working with #24 above, Directorate for UNESCO Affai
DEPARTMENT OF TRANSPORTATION				
25. Federal Aviation Administration		X		
...Reports only that "FAA is developing means to create awareness & cooperation of the general public of programs designed to improve the human environment."				
26. Federal Highway Administration			X	
27. ACTION		X		
...Thru VISTA, has EE related to energy conservation in community activities--91 serving volunteers.				..Deals with all technical matters of pollution, waste management, housing, flooding , etc.
28. APPALACHIAN REGIONAL COMMISSION	??			..Did not report to ERIC; ERIC quoted from the U.S. Government Manual for '77 '78.
..."...Has supported a number of environmental education activities... falling in categories of: Curriculum development...,higher education teacher training, adult education, career building, joint programs with private sector, & public information in EE."				

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
29. CONSUMER SERVICES ADMINISTRATION			X	..Reported by state, some of which do say they hold public workshops on energy conservation through "SEOO." ..Primarily provides "consumer education on utility rate structures and reform, & on alternative energy technologies...
30. ENVIRONMENTAL PROTECTION AGENCY ...Has Visitor Center in D.C.: gives classes almost daily (all educational levels); provides pamphlets, exhibits, films. ...Distributes EE materials. ...Maintains Spmkers Bureau. ...Provides environmental films thru Modern Talking Picture Service. ...Distributes decals, environmental glossary, envir. control laws, classroom materials, coloring books, etc. ...Administers the President's Environmental Merit Awards Program.				..NOTE: Considers itself to have little in the way of EE, due to their definition of EE, which must not be career related--and MOST of their programs are career/work force related. They "stress planning, policy guidance, & assistance to states and localities in staffing their pollution control agencies", etc. ...Also has interagency agreements said to impact state & local agencies. ..This is EPA's only education program with a budget allocation in EE.
31. INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN ...Relates to public chiefly thru its publications: non-technical monthly newsletter, POTOMAC BASIN REPORTER; & other publications, such as its new quarterly, POTOMAC ISSUES. ...Some field trips conducted--chiefly for politicians and mass media representatives, plus some strong citizen activists.			X (as such)	...Is related to EE in that it actively attempts to increase citizens' knowledge of technical methods for resource use, land use practices, and attitude changing. ..Thus far, has dealt with 208 areawide waste treatment programs, water shortage and methods for conservation, and land disposal of sewage. ...Mostly aims its work at people already in "positions of responsibility."

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
31. INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN (continued) FUTURE: Is planning the Thames/ Potomac Seminars.."to compare social,political, and technological problems and management mechanisms" of the two river basins.				**EE Budget**: About $88,557.00 .
32. NATIONAL AERONAUTICS & SPACE ADMINISTRATION			X (as such)	...BUT, provides consultant and speaker services, publications, films to schoo to help relate "their courses and units in earth science and E.E. to the new tools and new findings of NASA's earth observation programs." ...Has Education Officersiin 7 regions.
33. NATIONAL ENDOWMENT FOR THE HUMANITIES			X	..Provides grants for scholarly researc education, & activities for general pul lic ..Has several supported projects,at var ious universities, on topics which will provide perspectives on environmental issues as evaluated"in terms of human- istic quality." ..Has deep concern for relationship of values to science and technology.

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
34. NATIONAL SCIENCE FOUNDATION ...Has involvement totally through financial support. (See last column.)	XX			..Has no in-house administered programs provides more than $1 million annually in support to EE projects to develop E.E.curricula, at national level. ..Also supports faculty education activities (from elementary thru college), student educational activities, and dissemination of course & curriculum development projects. ..FY 77 Estimated support for E.E.total is $5,619,000.00.
35. SMALL BUSINESS ADMINISTRATION			X	..Conducts studies to measure general impact of air,water,& noise pollution abatement efforts on small business.
35. SMITHSONIAN INSTITUTION: CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES ...Conducts scientific research activities (such as estuarine & upland ecology). ..Conducts research in outdoor environmental education, looking for improved methods for teaching "Environmental concepts." ..Has curriculum development projects, especially geared to developing new teaching methods and easily accessible home environments. ..Has information transfer program--focusing on land use and water resource management decisions.	X			..Budget is 12% of Center's entire budg and only .1% of entire Smithsonian budg for E.E. ..(NOTE: Several other bureaus of the Smithsonian perform environmental research "which often have educational implications."

APPENDIX II: NON-LAND MANAGEMENT AGENCIES

Agency (with EE description)	Strong EE Involvement	Some EE Involvement	No EE Involvement	Other, Pertinent Resources and/or Remarks
36. U.S. WATER RESOURCES COUNCIL			X	..Coordinates water resources policy matters within Executive Branch of Fed' government.
37. VETERANS ADMINISTRATION			X	..Cites itself as being"among the leaders in the environmental protection and energy conservation effort."

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APPENDIX III: REFERENCES & RESOURCES

REFERENCES

Legislation:

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2. Outdoor Recreation Act of 1963.
3. Historic Preservation Act of 1966.
4. Land and Water Conservation Fund Act of 1964 (P.L.88-578, as amended).
5. National Environmental Policy Act (NEPA) of 1969.
6. Environmental Education Act of 1970 (P.L. 91-516, amended and reauthorized May 1974 as P.L. 93-276).
7. Coastal Zone Management Act of 1972 (P.L.92-583).
8. Technology Assessment Act of 1974.
9. Federal Land Policy & Management Act of 1976 (P.L.94-579).
10. Bill H.R. 10570, to extend the Environmental Education Act.
11. "Brademas Hearings"....Hearings on the Environmental Education Act Bill H.R. 10570, by Subcommittee on Select Education of the Committee on Education & Labor, June 6 and 7, 1977, Washington,D.C.
12. Environmental Education Act Amendments, Report No. 95-885, February 16,1978 (to accompany H.R.10570).

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2. Alliance for Environmental Education and The Western Regional Environmental Education Council. Environmental Education Perspectives and Prospectives: Key Findings and Major Recommendations. (Report of Conference held July 6-12,1975 at Snowmass, Colo.) ERIC/SMEAC, Dec.1975.
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11. FICE/Subcommittee on Environmental Education. Recent Minutes, April and May 1978.

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RESOURCES

Task Force on the Nationwide Outdoor Recreation Plan's Environmental Education and Recreation Issue

Barbara Clark, Chairperson (NPS)
Audrey Dixon (NPS)
Stan Lock (NPS)
Ed McCrea (FWS)

Select Committee of the Subcommittee on Environmental Education, FICE

Walter Jeske, Chairperson (SCS)
Alexander Barton (NSF)
John Paulk (TVA)
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RESOURCES (continued)

Department of Interior's Environmental Education Policy Steering Committee

Hope Moore, Chairperson (DOI)
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Bruce Bandurski (BLM)
Barbara Clark (NPS)
Angela Cummings (LWR)
Audrey Dixon (NPS)
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Jim Hart (BuRec)
Stan Lock (NPS)
Jean Matthews (NPS)
Ed Maust (BuMi)
Ed McCrea (FWS)
Conley Moffett (FWS)
Tom Noel (HCRS)
Linda Pierce (NPS)
George Quist (BIA)
Peg Rosenberry (AJC/YCC)
Priscilla Young (BE&M)